KC-130J CREW CONCEPT DECISION BRIEF

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WHY REQUIRED?

- KC-130J CONVERSION TRAINING BEGINS JAN 03 (IOC JAN 04)

- T&R AND TRAINING PIPELINES NOT READY

- JOINT C-130 FRS INTER-SERVICE TRAINING REVIEW ORGANIZATION (ITRO) STUDY DELAYED (JUL 01 MAB)

PROCESS

- DEVELOPMENTAL TEST RESULTS
- TTF RECOMMENDATIONS
- USAF OPERATIONAL LESSONS
- HQMC WORKGROUP
- INTERNATIONAL USERS

KC-130J COCKPIT

AUGMENT CREW STATION (ACS)

PILOT/ ACS EQUIPMENT ARE DUPLICATE

ASSUMPTIONS

- OPTIMUM WARFIGHTING CAPABILITY
- EXPEDITIONARY MAINTENANCE CAPABILITY
- NO STRUCTURE INCREASE IN “J” SQUADRONS
- AVOID KC-130F/R/T AIRCREW SHORTAGES
  - LONG TRAINING TIMES
  - SMALL MOS POPULATIONS

COMMON CONCLUSIONS

- BASIC CREW: 2 PILOTS AND CREWMEMBER
- AUGMENT CREW STATION (ACS) DUTIES REQUIRED FOR SOME HIGH TASK MISSIONS
- EITHER PILOT OR NAVIGATOR CAN FILL ACS DUTIES
- ENLISTED NAV STRUCTURE PHASE OUT

KC-130J CREW CONCEPT

KC-130F/R		KC-130J
2 PILOTS	→	2 or 3 PILOTS
FLT ENG FLT MECH	→	CREW CHIEF
NAVIGATOR		
LOADMASTER	→	LOADMASTER

KC-130J CREW CONCEPT

PILOTS

MISSION COMMAND
INFORMATION MANAGEMENT

- AIRCRAFT CONTROL
- MISSION PLANNING/ EXECUTION
- PRIMARY NAVIGATION
- COMMUNICATION
- COCKPIT EMERGENCIES

ACS

(3RD PILOT)

SITUATIONAL AWARENESS SUPPORT

- RADAR OPERATION
- MISSION UPDATES
- AERIAL REFUELING OPERATIONS

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KC-130J CREW CONCEPT

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CREW CHIEF **EXPEDITIONARY MAINTENANCE**

- IN FLIGHT FAULT DIAGNOSIS
- CARGO COMPARTMENT EMERGENCY PROCEDURES
- BASIC AIRCRAFT LOADING
- TACTICAL OBSERVER

LOADMASTER **ADVANCED AIRCRAFT LOADING**

- BASIC SERVICING
- CARGO COMPARTMENT EMERGENCY PROCEDURES
- IN FLIGHT FAULT DIAGNOSIS
- TACTICAL OBSERVER

ACS REQUIREMENTS

MISSION	ACS	LM
Air Land w/ less than 20 pax and simple cargo		
Fixed Wing AR	X	X
Helo AR	X	X
Aerial Delivery (AD)		X
Tactical Aerial Delivery (LOW LEVEL INGRESS)	X	X
Tactical Landing Zones (TLZ)		
Rapid Ground Refueling (RGR)		X
Casualty Evacuation (CASEVAC)		X
Search and Rescue (SAR)		X
Battlefield Illumination		X

KC-130F/R FY 01 UTILIZATION

MISSION TYPE	ACTUAL SORTIES	ACTUAL %SORTIES	RQR ACS? (YES/NO)
LOG	2520	40.9%	
FWAR	1028	16.6%	YES
HAR	494	8.0%	YES
TLZ	197	3.1%	
AD	175	2.8%	YES
RGR	71	1.1%	
DASC	54	0.8%	
BI	6	0.1%	
ADMIN	1226	19.9%	
FORM	275	4.4%	
LL	113	1.8%	
	6159	**100%**	

KC-130J CREW CONCEPT

BEST SUPPORT OF VMGR EXPEDITIONARY OPERATIONS

- "EXPEDITIONARY MAINTAINER" ON CREW

BEST MISSION SUPPORT FOR AIRCRAFT COMMANDER

- PILOT AT ACS

EFFICIENT USE OF VMGR MANPOWER

- KC-130 F/R/T BASIC CREW = 6
- KC-130J BASIC CREW = 4

FLEXIBLE

- ALLOWS CHANGE WITH USMC EXPERIENCE

BACK UP SLIDES

ACS REQUIREMENTS

AIRCREW DUTY	TASKS
• NAVIGATION — RADAR OPERATION SUPPORT	WORKLOAD MISSION UPDATES FOR PILOTS
• TACTICAL CHECKLIST MANAGEMENT	MANAGE NON-HUD CHECKLISTS
• AERIAL REFUELING PANEL OPERATION	PANEL ACCESS
• AIRCRAFT FUEL SYSTEM MANAGEMENT	PANEL ACCESS

CREW SEAT RATIO

FIXED WING	CSR	PAA	PILOT T/O
AV-8B	1.55	16	
EA-6B	1.6	5	
F/A-18C/D	1.58	12	→ 36
ROTARY WING			
CH-46E	1.2	12	→ 28
CH-53E	1.2	16	
UH/AH	1.2	9/18	
MV-22	1.2	12	→ 28
TRANSPORT			
KC-130	1.75	12	→ 42
UC-35	1.75	5	
C-12	1.75	17	
C-9	1.75	2	
C-20	1.75	1	

KC-130J CREW CONCEPT
"USAF OPTION"

KC-130F/R		KC-130J
2 PILOTS	→	2 or 3 PILOTS
FLIGHT ENG FLIGHT MECH	→	PLANE CAPTAIN
NAVIGATOR (TSO)		
LOADMASTER	→	LOADMASTER

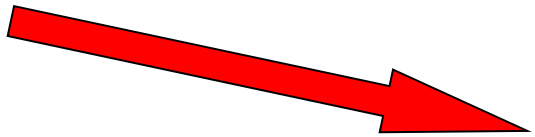
KC-130J CREW CONCEPT
TWO MOS OPTION

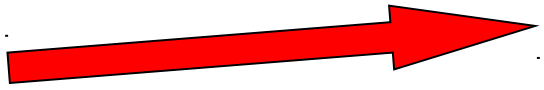
KC-130F/R
2 PILOTS

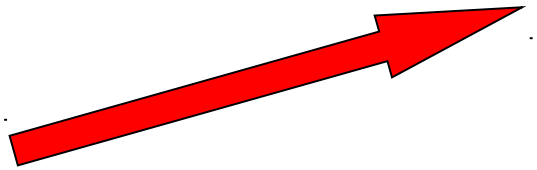
FLIGHT ENG
FLIGHT MECH

NAVIGATOR
(TSO)

LOADMASTER







KC-130J
2 or 3 PILOTS

CREW
CHIEF